- (12) INTERNATIONAL APPLICATION PUBLISHED ACCORDING TO THE PATENT COOPERATION TREATY (PCT)
- (19) World Intellectual Property Organization
  International Office
- (43) International publication date

  January 25, 2001 (1/25/2001) PCT
- (10) International publication number
  WO 01/05805 A2
- (51) International patent classification<sup>7</sup>: C07J
- (21) International file number: PCT/DE00/02390
- (22) International application date: July 17, 2000 (7/17/2000)
- (25) Filing language: German
- (26) Publication language: German
- (30) Priority data: 199 34 088.9 July 15, 1999 (7/15/1999) DE
- (71) Applicant (for all designated countries except for the U.S.): SCHERING AKTIENGESELLSCHAFT [DE/DE]; Müllerstrasse 178, D-13353 Berlin (DE).
- (72) Inventors; and
- (75) Inventors/applicants (only for the U.S.):

  NEEF, Günter [DE/DE]; Markgraf-Albrecht-Strasse 4, D-10711

  Berlin (DE). GOLDE, Roland [DE/DE]; Schönfliesser Strasse
  24, D-16562 Bergfelde (DE). FRITZEMEIER, Karl-Heinrich

  [DE/DE]; Rabenstrasse 5a, D-13505 Berlin (DE).
- (81) Designated countries (National): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,

KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated countries (Regional): ARIPO Patent (GH, GM, KE,
LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian Patent (AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM), European Patent (AT, BE,
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
SE), OAPI Patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML,
MR, NE, SN, TD, TG).

## Published:

-- Without international search report and to be republished after receipt of the report.

To clarify the two-letter code, and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.

(54) **Title:** NEW C-19-HALOGEN-SUBSTITUTED STEROIDS OF THE ANDROST-9(11)-ENE SERIES, PROCESS FOR THEIR PRODUCTION AS WELL AS THEIR USE